Simplifying Industrial Ethernet Design

With multiple variants of Industrial Ethernet protocols, designing industrial systems can be far from simple. You need to negotiate with different vendors, pay up-front licensing fees, and worry about tracking sales. Altera’s Industrial Ethernet solution can help you eliminate these headaches.

By using our FPGAs with an integrated Industrial Ethernet function and our simplified licensing structure, you can support most of your required protocols and redirect your resources for a more cost-effective design.

To make it easier for you to implement different slave Industrial Ethernet protocols with the same hardware, we teamed with Softing Industrial Automation GmbH, the world leader in Industrial Ethernet intellectual property (IP) protocols. The combination of our FPGA with Softing’s IP and software stack provides an easy and inexpensive way for you to develop Industrial Ethernet and fieldbus connectivity platforms with:

- No license negotiation
- No up-front licensing costs
- No per-unit royalty reporting

Supported Industrial Ethernet Protocols

- PROFINET
- EtherCAT
- PROFINET/IP
- Ethernet/IP
- POWERLINK
- Modbus
Access IP in Three Simple Steps

Step 1: Download the custom slave protocol IP and software stack from Softing for all Altera Cyclone® III and Cyclone IV devices

Step 2: Evaluate your protocol IP using the Quartus® II software tool and in hardware using Altera or Softing development kits

Step 3: Ready for production? Purchase your low-cost security CPLD for less than $3 each in 5000+ unit volume through your local Altera sales representative

Easy-to-Use Two-Chip Solution

The protocol IP and reference designs are hardware tested on both the Altera® Industrial Networking Kit (INK) featuring the Cyclone® IV FPGA or Softing’s FPGA RTEM CIII kit.

Want to dig deeper?

To learn more about Altera’s Industrial Ethernet solutions, visit us at www.altera.com/industrialethernet, or contact your local sales representative.